

## **REMARKS**

Claims 1, 7, 11, 13, 14 and 18 have been amended. No claims have been added or cancelled. Therefore, claims 1-19 are pending in the application. Reconsideration is respectfully requested in light of the following remarks.

### **Section 102(e) Rejection:**

The Examiner rejected claims 1-4, 6, and 18-19 under 35 U.S.C. § 102(e) as being anticipated by Aultman (U.S. Publication 2005/0021869). Applicant respectfully traverses this rejection for at least the following reasons.

Regarding claim 1, Aultman clearly fails to disclose *one or more host servers that are configured to store primary data on one or more storage devices; wherein, subsequent to the primary data being stored, one or more of the host servers are configured to initiate a backup operation of the primary data to store backup data of the stored primary data on one or more of the storage devices; and wherein the backup server is configured to initiate a server-free backup through the SAN fabric of said backup data to one or more of the archival storage devices*. Specifically, Aultman does not describe a server-free backup of backup data of stored primary data to one or more archival storage devices through a SAN fabric, as required by Applicant's claim 1. Instead, only backups of primary data, such as project data, are described. For example, the Examiner submits that the consolidated disk storage array 66 of FIGs. 6 and 12 stores backup data of primary data. This is incorrect. There is nothing in Aultman that describes the data stored on this disk array as backup data of stored primary data, nor does Aultman describe that data copied from disk array 66 to tape backup library 34 is backup data of stored primary data. While paragraph [0101], cited by the Examiner, describes NBU media servers 128 providing fiber channel connectivity to disk storage array 66 and to tape backup library 34, it does not describe a server-free backup of backup data of stored primary data to tape backup library 34. In fact, paragraph [0101]

itself appears to teach away from the Examiner's interpretation when it states, "The NBU media servers 128, 130 also are configured to back up project's servers."

In the Response to Arguments section of the Final Office Action, the Examiner asserts, "there is only one type of data and applicant's claim simply refers to different copies of that data stored in a primary storage area, a backup storage area, and an archival storage area". The Examiner appears to be misunderstanding Applicant's argument. The claim clearly and explicitly recites that the backup data of the stored primary data is stored (subsequent to the primary data being stored), and the backup server is configured to initiate a server-free backup through the SAN fabric of the backup data to one or more archival storage devices. Thus, the backup data is created from the primary data, and the archival data is created from the backup data. In the Advisory Action mailed August 28, 2006 the Examiner asserts that Applicant's arguments for three types of data rely on the language "derived" from, but that the applicant's disclosure has no support for "derived" backup data (i.e., checksums, change data, parity bits, etc.). The Examiner submits that the specification merely states that the data is a "copy", as explained in the rejection. However, Applicant did not argue that any of these elements are derived from primary data, as the Examiner suggests. Furthermore, Applicant asserts that the plain language of claim 1 neither requires nor precludes these elements being included in the backup data of the claim. Applicant's claim does, however, recite that *the backup server is configured to initiate a server-free backup through the SAN fabric of said backup data to one or more of the archival storage devices, where subsequent to the primary data being stored, one or more of the host servers are configured to initiate a backup operation of the primary data to store backup data of the stored primary data on one or more of the storage devices*. Therefore, the Examiner's point is irrelevant. Regardless of whether the primary data, backup data, and archived data are identical copies of each other or otherwise derived, Aultman clearly fails to disclose a system or method in which primary data is stored; subsequent to primary data being stored, backup data from the primary data is stored; and then this backup data is backed up to one or more archival devices using a server-free backup, as required by claim 1.

As argued above, Aultman fails to disclose the particular limitations recited in claim 1; in particular, Aultman nowhere teaches the server-free backup of the backup data (of previously stored primary data) to one or more archival storage devices as recited in the claims. The Examiner's comments in the Final Office Action and again in the Advisory Action fail to address the shortcomings of Aultman in regard to the specific limitations recited in claim 1.

In the Advisory Action, the Examiner takes issue with Applicant's remarks regarding the boundaries of Aultman's SAN. The Examiner submits that he interprets the entirety of the EBR network as the SAN, which is connected via TCP/IP. However, the Examiner's interpretation does not match the descriptions provided by Aultman. Specifically, even were the SAN to include the entirety of the EBR network, which Applicant argues it clearly does not, many of the cited storage elements are not coupled to the SAN fabric (for which the Examiner cites SAN switch 90) as required in the claims (a SAN fabric...configured to couple the one or more host servers to the plurality of storage devices). Furthermore, Applicant asserts that this, again, is irrelevant to the argument made above, i.e., that Aultman clearly fails to disclose a system in which *the backup server is configured to initiate a server-free backup through the SAN fabric of said backup data to one or more of the archival storage devices.*

As the Examiner is no doubt aware, anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical** invention must be shown in as complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As discussed above, Aultman clearly fails to disclose *wherein one or more of the host servers are configured to store primary data on one or more of the storage devices; wherein, subsequent to the primary data being stored, one or more of the host servers are configured to initiate a backup operation of the primary data to store backup data of the stored primary data on one or more of the storage devices; and one or more of the storage devices comprise one or more archival*

*storage devices, and wherein the backup server is configured to initiate a server-free backup through the SAN fabric of said backup data to one or more of the archival storage devices*. Therefore, Aultman cannot be said to anticipate claim 1.

For at least the reasons above, the rejection of claim 1 is not supported by the cited art and removal thereof is respectfully requested.

Claim 18 includes limitations similar to claim 1, and so the arguments presented above similarly apply to this claim, as well. For example, claim 18 recites *one or more host servers configured to store the primary data on the plurality of storage devices, wherein at least one of the host servers comprises a backup server configured to copy the stored primary data to the plurality of storage devices as the backup data subsequent to the one or more host servers storing the primary data, and wherein the backup server is configured to initiate a third party copy (3PC) to produce the archival data from the backup data*. Thus, claim 18 also requires a system in which **primary data is stored; subsequent to primary data being stored, backup data copied from the primary data is stored; and then this backup data is copied to produce archival data**, which is clearly not disclosed by Aultman.

Further regarding claim 18, as noted in the Applicant's previous responses, Aultman does not describe a backup server configured to initiate a third party copy (3PC) to produce the archival data from backup data. Moreover, the Examiner has not indicated what element in Aultman corresponds to the means for copying backup data through the SAN fabric to the one or more archival storage devices in response to the backup server initiating a third party copy, as recited in claim 18. Applicant asserts that no such means is described in Aultman. **The Examiner has yet to respond to this argument.**

Therefore, for at least the reasons above, the rejection of claim 18 is not supported by the cited art and Applicants respectfully request the withdrawal thereof.

### **Section 103(a) Rejections:**

The Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Aultman in view of Tamer (U.S. Patent 6,035,412), and claims 7-17 as being unpatentable over Aultman as applied to claim 1 above, in view of Tamer. Applicant traverses these rejections for at least the following reasons.

Regarding claim 7, contrary to the Examiner's assertion, Aultman in view of Tamer fails to teach or suggest all the limitations of this claim. In the Advisory Action mailed August 28, 2006 the Examiner takes issue with Applicant's interpretation of "mirroring" and submits that Applicant has not provided extrinsic evidence of such a narrow definition. Applicant asserts however, that Applicant's remarks are based on the description of "mirroring" found in the Examiner's own cited reference, Tamer. For example, Tamer's Abstract includes the following description:

"...the method including the steps of writing data to a first set of storage volumes; while data is being written to the first set of storage volumes, mirroring the contents of the first set of storage volumes into a second set of storage volumes..."

This description (and similar descriptions) are repeated in Tamer's claim 1 and in the specification, including in this passage at column 3, lines 26-31:

"Mirroring is done at the physical level either within the same data storage unit or between two data storage unit that are connected to each other through a high speed communication link. Thus, when a transaction appears in the primary storage system, it also appears in the mirrored copy at basically the same time."

Claim 10 includes a similar description of this feature:

"...linking a first region of storage in the first data storage system to a corresponding second region of storage in the second data storage system so that data written to the first region of the first data storage system is automatically written to the corresponding second region in the second data storage system..."

Given these and other descriptions of mirroring in Tamer, it is clear that Aultman in view of Tamer fails to teach or suggest *storing primary data to one or more storage devices in a storage area network (SAN); subsequent to said storing primary data,*

*copying the stored primary data from the one or more storage devices to one or more other storage devices in the SAN to create a backup of the stored primary data; and performing a server-free copy through the SAN of the backup data... to the archive storage*, as recited in claim 7. Tamer's mirroring clearly does not involve storing primary data to a storage device and then (subsequent to said storing) copying the stored data to create a backup of the stored data, and performing a server-free copy of the backup data to the archive storage. Instead, Tamer describes mirroring primary data "at basically the same time" that primary data is stored, and then backing up the data through mirror splitting. Since the mirrored data is not created by copying stored primary data subsequent to the primary data being stored, it clearly cannot be considered to be the backup data of Applicant's claim 7.

Further regarding claim 7, Aultman in view of Tamer also fails to teach or suggest *identifying backup data to be copied to an archive storage, wherein the backup data comprises the backup copy of the stored primary data*. The Examiner states that this identification is taught by Aultman, submitting, "Since the mirroring of the enterprise takes places, data to be copied must be identified." However, as described in Tamer and quoted above, mirroring of data may be done automatically while data is written to a first device. Therefore, no such identification is necessarily performed in Aultman. In fact, no such identification is disclosed and no alternate definition or description of "mirroring" is provided. For example, Aultman describes a master server 36 which may include 3 disk drives configured as follows, "Drive 1 is for Boot/OS/Swap/NetBackup/NetWorker Binaries, and Drives 2 and 3 are for NetBackup/NetWorker Indexes/Database for mirroring between trays" (see, e.g., paragraph [0068]), but does not describe how this mirroring takes place.

In addition, the limitations of claim 7 involving freezing and thawing of backup data are not taught or suggested by Aultman in view of Tamer, as the termination and resuming of mirroring in Tamer is directed toward a mirror, not the backup data of Applicant's claim (i.e. backup data created by copying stored primary data subsequent to it being stored.) For example, the Examiner admits that Aultman does not disclose the

process by which archiving occurs and relies on Tamer to disclose the method. However, contrary to the Examiner's assertion, Tamer also does not teach or suggest server-free archiving of backup data in a SAN as recited by Applicant's claim 7. The Examiner cites Tamer as disclosing freezing the backup data to prevent the backup data from being altered, in column 2, lines 14-19. However, as discussed above, this citation does not describe freezing backup data (i.e. backup data created by copying stored primary data subsequent to the primary data being stored), as required by Applicant's claim. There is nothing in Tamer that teaches or suggests freezing backup data. Similarly, the Examiner's remarks regarding the teaching of the limitations *while the backup data is frozen, performing a server-free copy through the SAN of the backup data from one or more storage devices storing the backup data to the archive storage; and after completing the server-free copy, thawing the backup data so that the backup data may again be altered* are not taught by Tamer, since the data frozen, backed up, and thawed in Tamer cannot be considered the backup data of Applicant's claim. Therefore, Tamer clearly does not teach freezing and thawing backup data, as recited in Applicant's claim 7. The Examiner has mischaracterized the teachings of both Aultman and Tamer.

**Finally, in the rejection of claim 7 the Examiner has provided no motivation to combine the teachings of Aultman and Tamer.** Therefore, the Examiner has failed to state a *prima facie* rejection. The Examiner does briefly address the combination of Aultman and Tamer in the rejection of claim 5; however, this is in regard to the features of claim 5, not claim 7. The motivation to combine must be in regard to the specific combination of features. The Examiner has not provided any motivation whatsoever to modify Aultman according to Tamer to result in the specific combination of features recited in claim 7. Furthermore, as explained above, even if the teachings of Aultman and Tamer were combined, it would not result in the specific combination of features recited in claim 7. Finally, the reason stated by the Examiner in regard to claim 5 is completely irrelevant in regard to the features of both claim 5 and claim 7. The Examiner states that it would be obvious to combine the references to "allow for exact mirroring of the primary server in the backup server." However, modifying Aultman to allow exact mirroring of the primary server in the backup server would in no way result in the

features recited in claim 7. The reason provided by the Examiner has no relevance to the claimed invention. **The Examiner has yet to address this argument.**

For at least the reasons above, the rejection of claim 7 is not supported by the cited art and removal thereof is respectfully requested.

Claim 13 includes limitations similar to claim 7, and so the arguments presented above apply similarly to this claim, as well.

Applicants assert that numerous other ones of the dependent claims recite further distinctions over the cited art. Applicants traverse the rejection of these claims for at least the reasons given above in regard to the claims from which they depend. However, since the rejections have been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time. Applicants reserve the right to present additional arguments.



## CONCLUSION

Applicants submit the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5760-16500/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Petition for Extension of Time
- ☐ Notice of Change of Address
- ☒ Request for Continued Examination

Respectfully submitted,



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